Remarks

Claims 1-10, 12, 14 and 15 are pending. Claim 1 has been amended to eliminate the alkoxy, hydroxy, alkanoyloxy groups from the Markush group for R_7 and R_9. Claims 1 and 14 have been amended to delete the divalent group being Q-interrupted-Q-C_4-C_{12}alkylene-Q. Claim 1 has also been amended to delete two embedded preferred embodiments. Claims 3 and 5 have been amended to delete an embedded preferred embodiment. Claim 14 has been amended to restrict R_4 to groups that are bonded to the benzofuranone moiety by an oxygen atom. No new matter has been added.

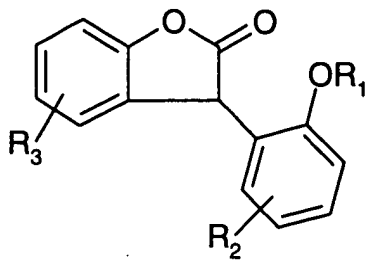
The Examiner rejects claims 1-11 and 13-16 under 35 U.S.C. 112(2) as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicants regard as their invention. The Examiner objects to the phrase L is "Q interrupted...Q" in claims 1 and 14. The phrase has been deleted from both claims.

The objects/rejects claims 11, 13 and 16 as being "use claims". The claims have been cancelled without prejudice to the filing of divisional applications employing conventional process claim format.

The Examiner objects to embedded preferred embodiments in claims 1, 3, and 5. Each of the preferred embodiments has been deleted.

The Examiner rejects claims 1-5 and 7-11 (now claims 1-5 and 7-10) under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,981,160 ("Odenwalder et al."). Applicants respectfully traverse this rejection.

Odenwalder teaches the use of Benzofuranones of the formula:



as scavengers for the oxidized developer. The compounds shown in Odenwalder must contain an alkoxy group (OR_1) ortho to the point of attachment of the unfused phenyl moiety.

Claim 1 has been amended to exclude C_1-C_2alkoxy or C_2-C_{20}alkoxy (that can be interrupted) from the scope of R_7 and R_9. The R_7 and R_9 substituents are found on the substituted phenyl ring of formula II. In view of said amendment, Applicants request that the Examiner reconsider and withdraw her anticipation rejection of claims 1-5, 7-10 in view of Odenwalder.

The Examiner rejects claims 1-16 (now claims 1-10, 12, 14 and 15) under 35 U.S.C. 102 as being anticipated by U.S. Pat. No. 5,597,854 ("Birbaum et al."). Applicants respectfully traverse this rejection.

The present invention relates to a process for preventing migration of oxidized developer in a color photographic material by using the particularly defined benzofuranone compounds of claim 1 and its dependent claims. Birbaum describes the benzofuranone compounds as being possible co-additives with the latent light stabilizers taught therein. In fact, Birbaum listed these compounds as one of many optional types of UV absorbers and light stabilizers. The Examiner has not indicated any motivation for one skilled in the art to select the particularly defined compounds from the multiple of possible stabilizers for use in color photography films. The preferred applications don't even point to photography application. One skilled in the art would be expected to use the compositions taught in Birbaum for stabilizing plastics, rubbers, paints or adhesives. Applicants submit that the Examiner has selected portions of the prior art based upon an understanding of the claimed invention. The motivation and suggestion for use to prevent migration of oxidized developer in a color

photographic material is not found in Birbaum. In the absence of any such motivation, Birbaum certainly fails to disclose each and every element of the claimed process. Applicants request that the Examiner reconsider and withdraw her anticipation rejection of claims 1-10, 12, 14 and 15 in view of Birbaum.

The Examiner rejects claims 14-16 (now claims 14 and 15) under 35 U.S.C. 103 as being unpatentable over Birbaum in view of U.S. Pat. 4,325,863 ("Hinsken et al."). The Examiner applies Birbaum as described above. The Examiner cites Hinsken as teachings benzofuranone compounds wherein the R_2 and R_4 groups are pentyl radicals. The Examiner alleges that it would have been obvious to replace the butyl group taught in Birbaum with the pentyl groups of Hinsken. Applicants respectfully traverse this rejection.

Claim 14 has been amended to limit the R_4 group bonded to the benzofuranone moiety via an oxygen molecule. These compounds are described in examples 13-16 (compounds 29-32). All of the compounds in Hinsken are bonded to the benzofuranone moiety via a carbon atom. Hence, even assuming there is any motivation for the combination and modification urged by the Examiner, the resulting combination does not render the invention of claims 14 and 15 unpatentable.

Applicants submit that the present application is now in condition for allowance. Applicants request that the Examiner contact the undersigned representative if minor amendments will further prosecution.

Respectfully submitted,

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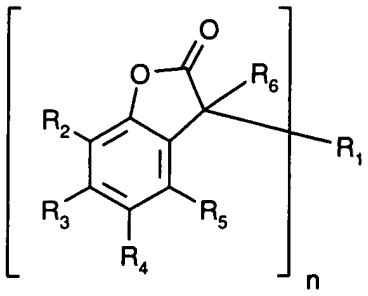
APPENDIX:

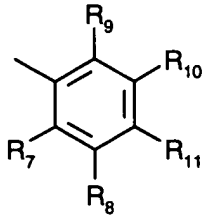
1. (amended) Process for preventing migration of the oxidised developer in a colour photographic material from one colour sensitive layer to another by incorporating a compound of the formula I into said material



(I),

wherein, if n = 1,

R_1 is a cyclic residue selected from naphthyl, phenanthryl, anthryl, 5,6,7,8-tetrahydro-2-naphthyl, 5,6,7,8-tetrahydro-1-naphthyl, thienyl, benzo[b]thienyl, naphtho[2,3-b]thienyl, thianthrenyl, dibenzofuryl, chromenyl, xanthenyl, phenoxathiinyl, pyrrolyl, imidazolyl, pyrazolyl, pyrazinyl, pyrimidinyl, pyridazinyl, indolizinyl, isoindolyl, indolyl, indazolyl, purinyl, quinolizinyl, isoquinolyl, quinolyl, phthalazinyl, naphthyridinyl, quinoxalinyl, quinazolinyl, cinnolinyl, pteridinyl, carbazolyl, -carbolinyl, phenanthridinyl, acridinyl, perimidinyl, phenanthrolinyl, phenazinyl, isothiazolyl, phenothiazinyl, isoxazolyl, furazanyl, biphenyl, terphenyl, fluorenyl or phenoxazinyl, each of which is unsubstituted or substituted by C_1-C_4alkyl, C_1-C_4alkoxy, C_1-C_4alkylthio, hydroxy, halogen, amino, C_1-C_4alkylamino, phenylamino or di(C_1-C_4-alkyl)amino; or R_1 is a radical of formula II



(II),

and, if n = 2,

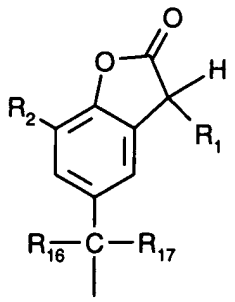
R_1 is unsubstituted or C_1-C_4alkyl- or hydroxy-substituted phenylene or naphthylene; or $-R_{12}$-X-R_{13}- ;

R_2, R_3, R_4 and R_5 are each independently of one another hydrogen; chloro; hydroxy; C_1-C_{25}-alkyl; C_7-C_9phenylalkyl; unsubstituted or C_1-C_4alkyl-substituted phenyl; unsubstituted or C_1-C_4alkyl-

substituted C_5-C_8cycloalkyl; C_1-C_{18}alkoxy; C_1-C_{18}alkylthio; C_1-C_4alkylamino; di(C_1-C_4-alkyl)amino; C_1-C_{25}alkanoyloxy; C_1-C_{25}alkanoylamino; C_3-C_{25}alkenoyloxy; C_3-C_{25}alkanoyloxy which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_6-C_9cycloalkylcarbonyloxy; benzoyloxy or C_1-C_{12}alkyl-substituted benzoyloxy; or R_2 and R_3, or R_3 and R_4, or R_4 and R_5, together with the linking carbon atoms, form a benzene ring;

or R_4 is $-C_mH_{2m}-COR_{15}$, $-O-(C_vH_{2v})-COR'_{15}$, $-O-(CH_2)_q-OR_{32}$, $-OCH_2-CH(OH)-CH_2-R'_{15}$, $-OCH_2-CH(OH)-CH_2-OR_{32}$, or $-(CH_2)_qOH$;

or, if R_3, R_5 and R_6 are hydrogen, R_4 is additionally a radical of formula III

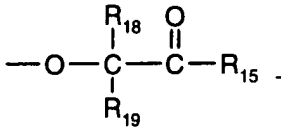


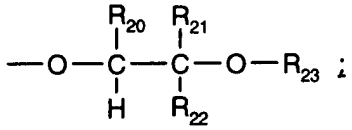
(III),

wherein R_1 is as defined above for n = 1;

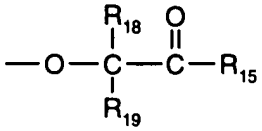
R_6 is hydrogen or, when R_4 is hydroxy, R_6 can also be C_1-C_{25}alkyl or C_3-C_{25}alkenyl;

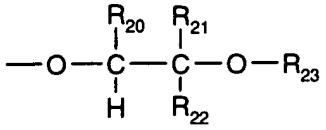
R_7 and R_9, are each independently of one another hydrogen; halogen; C_1-C_{25}alkyl; C_2-C_{25}alkyl which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_1-C_{25}alkylthio; C_3-C_{25}-alkenyl; C_3-C_{25}alkenyloxy; C_3-C_{25}alkynyl; C_3-C_{25}alkynyloxy; C_7-C_9phenylalkyl; C_7-C_9phenylalkoxy; unsubstituted or C_1-C_4alkyl-substituted phenyl; unsubstituted or C_1-C_4alkyl- substituted phenoxy; unsubstituted or C_1-C_4alkyl-substituted C_5-C_8cycloalkyl; unsubstituted or C_1-C_4alkyl-substituted C_5-C_8cycloalkoxy; C_1-C_4alkylamino; di(C_1-C_4alkyl)amino; C_1-C_{25}alkanoyl; C_3-C_{25}alkanoyl which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_1-C_{25}alkanoylamino; C_3-C_{25}alkenoyl; C_3-C_{25}alkenoyl which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_3-C_{25}-

alkenoyloxy; C_3-C_{25}alkenoyloxy which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_6-C_9-cycloalkylcarbonyl; C_6-C_9cycloalkylcarbonyloxy; benzoyl or C_1-C_{12}alkyl-substituted benzoyl; benzoyloxy or C_1-C_{12}alkyl-substituted benzoyloxy;  or

 ;

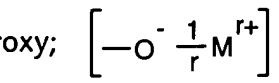
~~R_7~~-~~R_8~~, ~~R_9~~-R_{10} and R_{11} are each independently of one another hydrogen; halogen; hydroxy; C_1-C_{25}alkyl; C_2-C_{25}alkyl which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_1-C_{25}alkoxy; C_2-C_{25}alkoxy which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_1-C_{25}alkylthio; C_3-C_{25}-alkenyl; C_3-C_{25}alkenyloxy; C_3-C_{25}alkynyl; C_3-C_{25}alkynyloxy; C_7-C_9phenylalkyl; C_7-C_9phenylalkoxy; unsubstituted or C_1-C_4alkyl-substituted phenyl; unsubstituted or C_1-C_4alkyl- substituted phenoxy; unsubstituted or C_1-C_4alkyl-substituted C_5-C_8cycloalkyl; unsubstituted or C_1-C_4alkyl-substituted C_5-C_8cycloalkoxy; C_1-C_4alkylamino; di(C_1-C_4alkyl)amino; C_1-C_{25}alkanoyl; C_3-C_{25}alkanoyl which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_1-C_{25}alkanoyloxy; C_3-C_{25}alkanoyloxy which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_1-C_{25}alkanoylamino; C_3-C_{25}alkenoyl; C_3-C_{25}alkenoyl which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_3-C_{25}-alkenoyloxy; C_3-C_{25}alkenoyloxy which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_6-C_9-cycloalkylcarbonyl; C_6-C_9cycloalkylcarbonyloxy; benzoyl or C_1-C_{12}alkyl-substituted benzoyl;

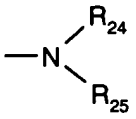
benzoyloxy or C_1-C_{12}alkyl-substituted benzoyloxy;  or

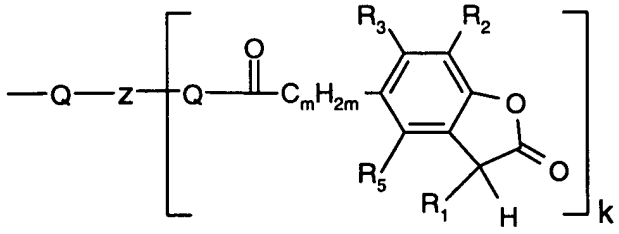
 or, in formula II, R_7 and R_8, or R_8 and R_{11}, together with the linking carbon atoms, form a benzene ring;

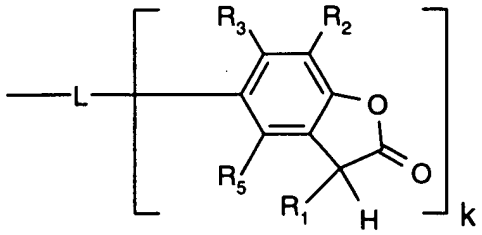
R_{12} and R_{13} are each independently of the other unsubstituted or C_1-C_4alkyl-substituted phenylene or naphthylene;

R_{14} is hydrogen or C_1-C_8alkyl;

R_{15} and R'_{15} independently are hydroxy;  ; C_1-C_{20}alkoxy; C_3-C_{20}alkoxy interrupted by O and/or substituted by a radical selected from OH, phenoxy, C_7-C_{15}alkylphenoxy, C_7-C_{15}alkoxyphenoxy; or are C_5-C_{12}cycloalkoxy; C_7-C_{17}phenylalkoxy; phenoxy;

 ; or a group of the formula IIIa or IIIb

 (IIIa);

 (IIIb);

R_{16} and R_{17} are each independently of the other hydrogen, CF_3, C_1-C_{12}alkyl or phenyl, or R_{16} and R_{17}, together with the linking carbon atom, are a C_5-C_8cycloalkylidene ring which is unsubstituted or substituted by 1 to 3 C_1-C_4alkyl;

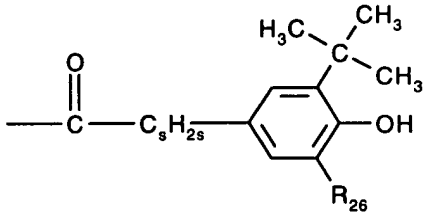
R_{18} and R_{19} are each independently of the other hydrogen, C_1-C_4alkyl or phenyl;

R_{20} is hydrogen or C_1-C_4alkyl;

R_{21} is hydrogen; unsubstituted or C_1-C_4alkyl-substituted phenyl; C_1-C_{25}alkyl; C_2-C_{25}alkyl which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_7-C_9phenylalkyl which is unsubstituted or substituted at the phenyl moiety by 1 to 3 C_1-C_4alkyl; C_7-C_{25}phenylalkyl which is interrupted by oxygen, sulphur or $>N-R_{14}$ and which is unsubstituted or substituted at the phenyl moiety by 1 to 3 C_1-C_4alkyl; or R_{20} and R_{21}, together with the linking carbon atoms, form a C_5-C_{12}cycloalkylene ring which is unsubstituted or substituted by 1 to 3 C_1-C_4alkyl;

R_{22} is hydrogen or C_1-C_4alkyl;

R_{23} is hydrogen; C_1-C_{25}alkanoyl; C_3-C_{25}alkenoyl; C_3-C_{25}alkanoyl which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_2-C_{25}alkanoyl which is substituted by a di(C_1-C_6alkyl)phosphonate group; C_6-C_9cycloalkylcarbonyl; thenoyl; furoyl; benzoyl or C_1-C_{12}alkyl-substituted benzoyl;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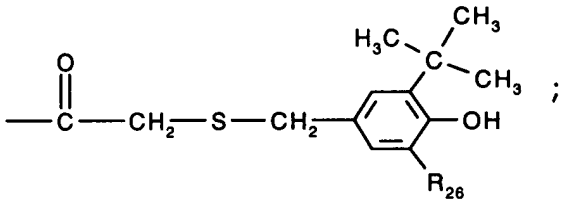
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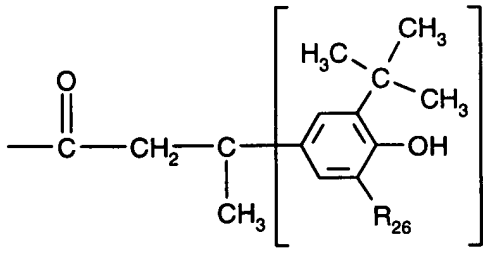
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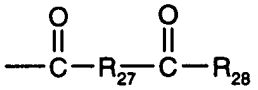
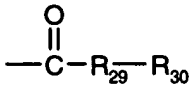
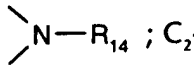
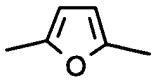
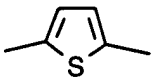
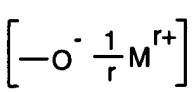
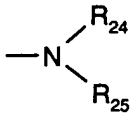

or


;

R_{24} and R_{25} are each independently of the other hydrogen or C_1-C_{18}alkyl;

R_{26} is hydrogen or C_1-C_8alkyl;

R_{27} is a direct bond; C_1-C_{18}alkylene; C_2-C_{18}alkylene which is interrupted by oxygen, sulphur or  ; C_2-C_{18}alkenylene; C_2-C_{20}alkylidene; C_7-C_{20}phenylalkylidene; C_5-C_8cycloalkylene; C_7-C_8bicycloalkylene; unsubstituted or C_1-C_4alkyl-substituted phenylene;  or  ;

R_{28} is hydroxy,  , C_1-C_{18}alkoxy or  ;

R_{29} is oxygen or -NH-;

R_{30} is C_1-C_{18}alkyl or phenyl;

R_{31} is hydrogen or C_1-C_{18}alkyl;

R_{32} is C_1-C_{18}alkanoyl; C_1-C_8alkanoyl substituted by phenyl or C_7-C_{15}alkylphenyl; C_3-C_{18}alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a linking group of valency (k+1) and is as a divalent group

-O-;

Q-C_2-C_{12}alkylene-Q;

-O-CH_2-CH(OH)-CH_2-O-;

-Q-C_2-C_{12}alkylene-Q-CO-C_vH_{2v}-O-;

-O-C_2-C_{12}alkylene-O-CH_2-CH(OH)-CH_2-O-;

~~Q-interrupted Q-C_4-C_{12}alkylene-Q;~~

Q-phenylene-Q or

Q-phenylene-D-phenylene-Q with D being C_1-C_4alkylene, O, S, SO or SO_2;

L as a trivalent group is Q-capped C_3-C_{12}alkanetriyl, a trivalent residue of a hexose or a hexitol, or a group $(-O-CH_2)_3C-CH_2OH$; -Q-C_aH_{2a}-N(C_bH_{2b}-Q-)-C_cH_{2c}-Q-;

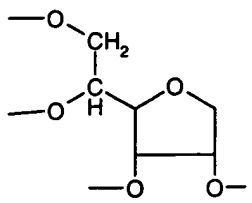
-Q-C_3-C_{12}alkanetriyl(-Q-CO-C_vH_{2v}-O-)$_2$;

-O-C_3-C_{12}alkanetriyl(-O-CH_2-CH(OH)-CH_2-O-)$_2$; and

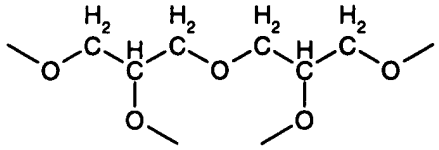
L as a tetravalent group is a tetravalent residue of a hexose or a hexitol;

-Q-C_4-C_{12}alkanetetryl(-Q-CO-C_vH_{2v}-O-)$_3$;

-O-C_4-C_{12}alkanetetryl(-O-CH_2-CH(OH)-CH_2-O-)$_3$; Q-capped C_4-C_{12}alkanetetryl; a group



or a group



;

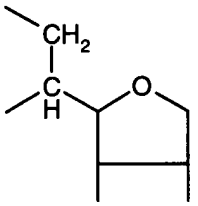
M is an r-valent metal cation;

Q is oxygen or -NH-;

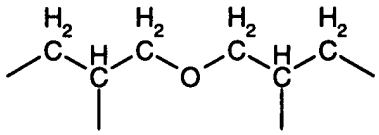
X is a direct bond, oxygen, sulphur or -NR_{31}- ;

Z is a linking group of valency (k+1) and is as a divalent group C_2-C_{12}alkylene; Q-interrupted C_4-C_{12}alkylene; phenylene or phenylene-D-phenylene with D being C_1-C_4alkylene, O, S, SO or SO_2; Z as a trivalent group is C_3-C_{12}alkanetriyl, a trivalent residue of a hexose or a hexitol, a group (-CH_2)$_3$C-CH_2OH, or a group -C_aH_{2a}-N(C_bH_{2b}-)-C_cH_{2c}-; and

Z as a tetravalent group is a tetravalent, carbon-ended residue of a hexose or a hexitol, C_4-C_{12}alkanetetryl, a group



or a group



;

a, b, c and k independently are 1, 2 or 3;

m is 0 or a number from the range 1-12~~, preferably 1-6~~;

n is 1 or 2;

q is 1, 2, 3, 4, 5 or 6;

r is 1, 2 or 3; and

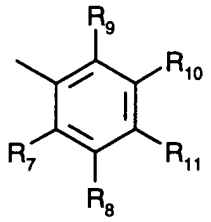
s is 0, 1 or 2;

v is 1, 2, 3, 4, 5, 6, 7 or 8~~, preferably 1 or 2~~;

provided that, when R_7 is hydroxy, alkanoyloxy or alkanoyloxy interrupted by O, S or N(R_{14}) and R_9 is hydrogen, R_{10} is not identical with R_4; and when R_9 is hydroxy, alkanoyloxy or alkanoyloxy interrupted by O, S or N(R_{14}) and R_7 is hydrogen, R_8 is not identical with R_4.

3. (amended) Process according to claim **1** wherein in the compound of formula I

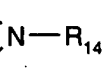
R_1 is naphthyl, phenanthryl, anthryl, 5,6,7,8-tetrahydro-2-naphthyl, 5,6,7,8-tetrahydro-1-naphthyl, thienyl, benzo[b]thienyl, naphtho[2,3-b]thienyl, thianthrenyl, dibenzofuryl, chromenyl, xanthenyl, phenoxathiinyl, pyrrolyl, imidazolyl, pyrazolyl, pyrazinyl, pyrimidinyl, pyridazinyl, indolizinyl, isoindolyl, indolyl, indazolyl, purinyl, quinolizinyl, isoquinolyl, quinolyl, phthalazinyl, naphthyridinyl, quinoxalinyl, quinazolinyl, cinnolinyl, pteridinyl, carbazolyl, -carbolinyl, phenanthridinyl, acridinyl, perimidinyl, phenanthrolinyl, phenazinyl, isothiazolyl, phenothiazinyl, isoxazolyl, furazanyl, biphenyl, terphenyl, fluorenyl or phenoxazinyl, each of which is unsubstituted or substituted by C_1-C_4alkyl, C_1-C_4alkoxy, C_1-C_4alkylthio, hydroxy, halogen, amino, C_1-C_4alkylamino, phenylamino or di(C_1-C_4-alkyl)amino, or R_1 is a radical of formula II



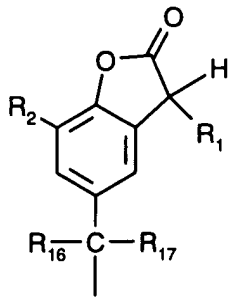
(II),

and, if n = 2,

R_1 is unsubstituted or C_1-C_4alkyl- or hydroxy-substituted phenylene or naphthylene; or -R_{12}-X-R_{13}- ,

R_2, R_3, R_4 and R_5 are each independently of one another hydrogen, chloro, hydroxy, C_1-C_{25}-alkyl, C_7-C_9phenylalkyl, unsubstituted or C_1-C_4alkyl-substituted phenyl; unsubstituted or C_1-C_4alkyl-substituted C_5-C_8cycloalkyl; C_1-C_{18}alkoxy, C_1-C_{18}alkylthio, C_1-C_4alkylamino, di(C_1-C_4-alkyl)amino, C_1-C_{25}alkanoyloxy, C_1-C_{25}alkanoylamino, C_3-C_{25}alkenoyloxy; C_3-C_{25}alkanoyloxy which is interrupted by oxygen, sulphur or  ; C_6-C_9cycloalkylcarbonyloxy, benzoyloxy or C_1-C_{12}alkyl-substituted benzoyloxy; or R_2 and R_3, or R_3 and R_4, or R_4 and R_5, together with the linking carbon atoms, form a benzene ring; or R_4 is

-C_mH_{2m}-COR_{15} or -$(CH_2)_qOH$ or, if R_3, R_5 and R_6 are hydrogen, R_4 is additionally a radical of formula III

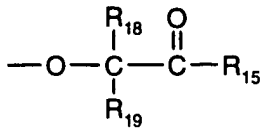


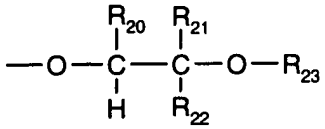
(III),

wherein R_1 is as defined above for n = 1;

R_6 is hydrogen or, when R_4 is hydroxy, R_6 can also be C_1-C_{25}alkyl or C_3-C_{25}alkenyl;

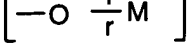
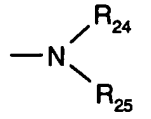
R_7, R_8, R_9, R_{10} and R_{11} are each independently of one another hydrogen, halogen, hydroxy, C_1-C_{25}alkyl; C_2-C_{25}alkyl which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_1-C_{25}alkoxy; C_2-C_{25}alkoxy which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_1-C_{25}alkylthio, C_3-C_{25}-alkenyl, C_3-C_{25}alkenyloxy, C_3-C_{25}alkynyl, C_3-C_{25}alkynyloxy, C_7-C_9phenylalkyl, C_7-C_9phenylalkoxy, unsubstituted or C_1-C_4alkyl-substituted phenyl; unsubstituted or C_1-C_4alkyl- substituted phenoxy; unsubstituted or C_1-C_4alkyl-substituted C_5-C_8cycloalkyl; unsubstituted or C_1-C_4alkyl-substituted C_5-C_8cycloalkoxy; C_1-C_4alkylamino, di(C_1-C_4alkyl)amino, C_1-C_{25}alkanoyl; C_3-C_{25}alkanoyl which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_1-C_{25}alkanoyloxy; C_3-C_{25}alkanoyloxy which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_1-C_{25}alkanoylamino, C_3-C_{25}alkenoyl; C_3-C_{25}alkenoyl which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_3-C_{25}-alkenoyloxy; C_3-C_{25}alkenoyloxy which is interrupted by oxygen, sulphur or $>N-R_{14}$; C_6-C_9-cycloalkylcarbonyl, C_6-C_9cycloalkylcarbonyloxy, benzoyl or C_1-C_{12}alkyl-substituted benzoyl;

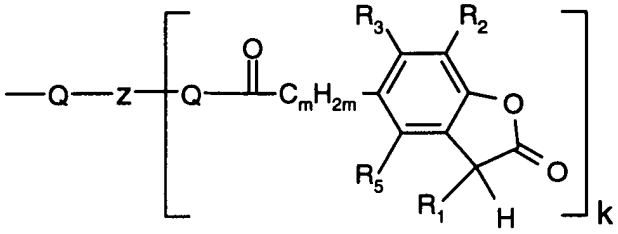
benzoyloxy or C_1-C_{12}alkyl-substituted benzoyloxy;  or

 or, in formula II, R_7 and R_8, or R_8 and R_{11}, together with the linking carbon atoms, form a benzene ring,

R_{12} and R_{13} are each independently of the other unsubstituted or C_1-C_4alkyl-substituted phenylene or naphthylene,

R_{14} is hydrogen or C_1-C_8alkyl,

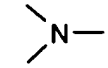
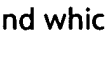
R_{15} is hydroxy,  , C_1-C_{20}alkoxy,  , or a group of the formula IIIa

 (IIIa);

R_{16} and R_{17} are each independently of the other hydrogen, CF_3, C_1-C_{12}alkyl or phenyl, or R_{16} and R_{17}, together with the linking carbon atom, are a C_5-C_8cycloalkylidene ring which is unsubstituted or substituted by 1 to 3 C_1-C_4alkyl;

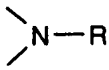
R_{18} and R_{19} are each independently of the other hydrogen, C_1-C_4alkyl or phenyl,

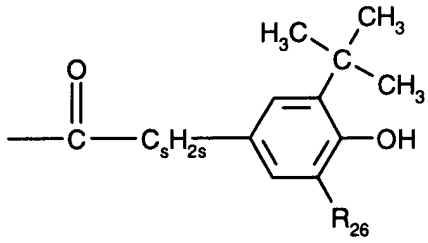
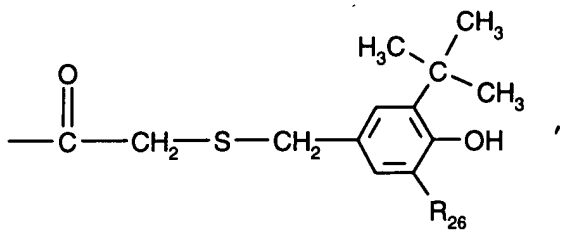
R_{20} is hydrogen or C_1-C_4alkyl,

R_{21} is hydrogen, unsubstituted or C_1-C_4alkyl-substituted phenyl; C_1-C_{25}alkyl; C_2-C_{25}alkyl which is interrupted by oxygen, sulphur or  ; C_7-C_9phenylalkyl which is unsubstituted or substituted at the phenyl moiety by 1 to 3 C_1-C_4alkyl; C_7-C_{25}phenylalkyl which is interrupted by oxygen, sulphur or  and which is unsubstituted or substituted at the phenyl moiety

by 1 to 3 C_1-C_4alkyl, or R_{20} and R_{21}, together with the linking carbon atoms, form a C_5-C_{12}cycloalkylene ring which is unsubstituted or substituted by 1 to 3 C_1-C_4alkyl;

R_{22} is hydrogen or C_1-C_4alkyl,

R_{23} is hydrogen, C_1-C_{25}alkanoyl, C_3-C_{25}alkenoyl; C_3-C_{25}alkanoyl which is interrupted by oxygen, sulphur or  ; C_2-C_{25}alkanoyl which is substituted by a di(C_1-C_6alkyl)phosphonate group; C_6-C_9cycloalkylcarbonyl, thenoyl, furoyl, benzoyl or C_1-C_{12}alkyl-substituted benzoyl;


,

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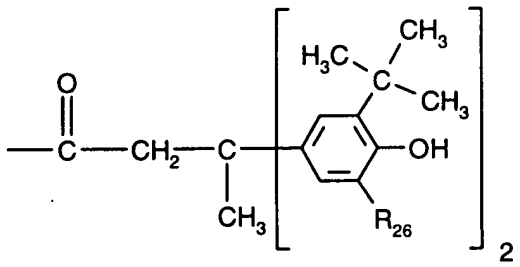
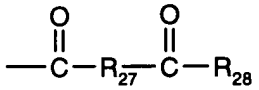
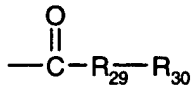
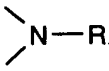
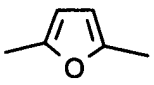
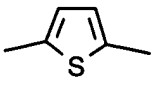
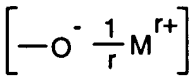
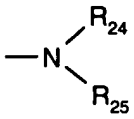

,

or

,

R_{24} and R_{25} are each independently of the other hydrogen or C_1-C_{18}alkyl,

R_{26} is hydrogen or C_1-C_8alkyl,

R_{27} is a direct bond, C_1-C_{18}alkylene; C_2-C_{18}alkylene which is interrupted by oxygen, sulphur or  ; C_2-C_{18}alkenylene, C_2-C_{20}alkylidene, C_7-C_{20}phenylalkylidene, C_5-C_8cycloalkylene, C_7-C_8bicycloalkylene, unsubstituted or C_1-C_4alkyl-substituted phenylene,  or  ,

R_{28} is hydroxy,  , C_1-C_{18}alkoxy or  ,

R_{29} is oxygen or -NH-,

R_{30} is C_1-C_{18}alkyl or phenyl,

R_{31} is hydrogen or C_1-C_{18}alkyl,

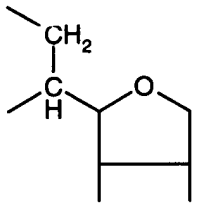
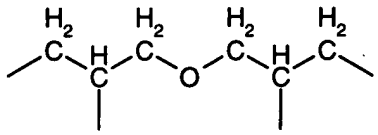
M is an r-valent metal cation,

Q is oxygen or -NH-,

X is a direct bond, oxygen, sulphur or -NR_{31}- ,

Z is a linking group of valency (k+1) and is as a divalent group C_2-C_{12}alkylene, Q-interrupted C_4-C_{12}alkylene, phenylene or phenylene-D-phenylene with D being C_1-C_4alkylene, O, S, SO or SO_2;

Z as a trivalent group is C_3-C_{12}alkanetriyl, a trivalent residue of a hexose or a hexitol, a group (-$CH_2)_3$C-CH_2OH, or a group -C_aH_{2a}-N(C_bH_{2b}-)-C_cH_{2c}-; and

Z as a tetravalent group is a tetravalent residue of a hexose or a hexitol, C_4-C_{12}alkanetetryl, a group  or a group  ;

a, b, c and k independently are 1, 2 or 3,

m is 0 or a number from the range 1-12, ~~preferably 1-6,~~

n is 1 or 2,

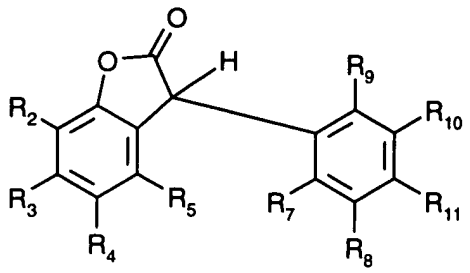
q is 1, 2, 3, 4, 5 or 6,

r is 1, 2 or 3, and

s is 0, 1 or 2;

provided that, when R_7 is hydroxy, alkanoyloxy or alkanoyloxy interrupted by O, S or N(R_{14}) and R_9 is hydrogen, R_{10} is not identical with R_4.

5. (amended) Process according to claim **1** wherein the compound of formula I corresponds to the formula IV



(IV)

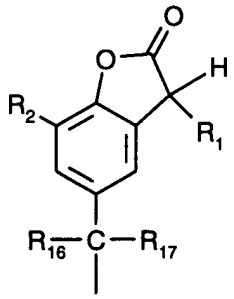
wherein

R_2 is H or C_1-C_{20}alkyl;

R_3 is H or C_1-C_{18}alkyl;

R_4 is C_1-C_8alkyl, H, C_1-C_6alkoxy or a group $-C_mH_{2m}-COR_{15}$; $-O-(C_vH_{2v})-COR_{15}$, $-O-(CH_2)_q-OR_{32}$; $-OCH_2-CH(OH)-CH_2-R_{15}$; $-OCH_2-CH(OH)-CH_2-OR_{32}$;

or a group of the formula III

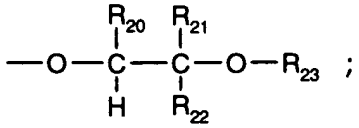


(III);

R_5 is H or C_1-C_{18}alkyl;

R_7 and R_9 are each independently of one another hydrogen; halogen; C_1-C_{25}alkyl; C_3-C_{25}-alkenyl; C_3-C_{25}alkynyl; C_7-C_9phenylalkyl; unsubstituted or C_1-C_4alkyl-substituted phenyl; unsubstituted or C_1-C_4alkyl-substituted C_5-C_8cycloalkyl;

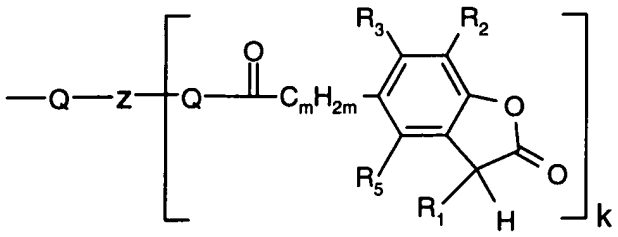
R_8, R_{10} and R_{11} independently are H, OH, chloro, C_1-C_{18}alkyl, C_1-C_{18}alkoxy, di(C_1-C_4alkyl)amino, C_7-C_9phenylalkyl; unsubstituted or C_1-C_4alkyl-substituted phenyl; unsubstituted or C_1-C_4alkyl-substituted C_5-C_8cycloalkyl; C_2-C_{18}alkanoyloxy, C_3-C_{18}-alkoxycarbonylalkoxy or



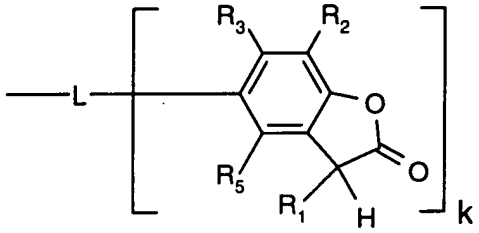
;

~~especially wherein at least 2 of the residues R_7, R_8, R_9, R_{10}, R_{11} are H;~~

R_{15} is C_1-C_{18}alkoxy; C_3-C_{20}alkoxy interrupted by O; or are cyclohexyloxy; C_7-C_{17}phenylalkoxy; phenoxy; or a group of formula IIIa or IIIb;



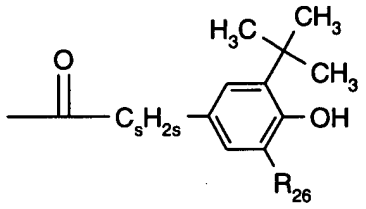
(IIIa);



(IIIb);

R_{16} and R_{17} independently are H, C_1-C_{12}alkyl or phenyl; or R_{16} and R_{17} together with the bonding carbon atom form a C_5-C_8cycloalkylidene ring;

R_{20}, R_{21} and R_{22} independently are H or C_1-C_4alkyl;

R_{23} is H, C_2-C_{18}alkanoyl or a group 

R_{26} is C_1-C_4alkyl;

R_{32} is C_1-C_{18}alkanoyl; C_1-C_8alkanoyl substituted by phenyl or C_7-C_{15}alkylphenyl; C_3-C_{18}alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a divalent group -O-; Q-C_2-C_{12}alkylene-Q; -O-CH_2-CH(OH)-CH_2-O-;

-Q-C_2-C_{12}alkylene-Q-CO-C_vH_{2v}-O-; -O-C_2-C_{12}alkylene-O-CH_2-CH(OH)-CH_2-O-;

Q is oxygen;

Z is C_2-C_{12}alkylene;

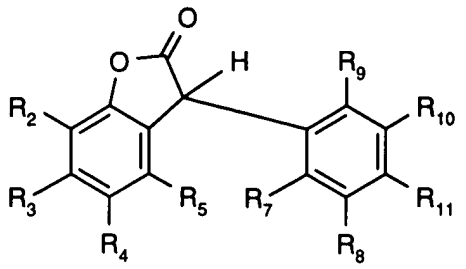
k is 1;

m is 1, 2, 3, 4, 5 or 6;

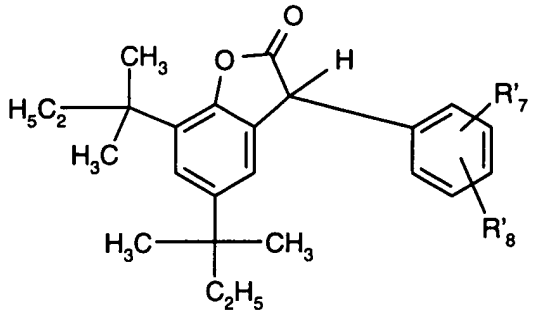
v is 1 or 2; and

s is 0, 1 or 2.

14. (amended) Compound of the formula V or VI



(V),



(VI),

wherein

R_4 ~~is $-(CH_2)_s-COR'_{15}$ or $-CH(CH_3)-COR_{15}$ or $-C_tH_{2t}-COR_{15}$, wherein C_tH_{2t} is a straight chain or branched alkylene moiety; or~~ R_4 is $-O-(C_vH_{2v})-COR_{15}$; $-O-(CH_2)_q-OR_{32}$;

$-OCH_2-CH(OH)-CH_2-R_{15}$; or $-OCH_2-CH(OH)-CH_2-OR_{32}$;

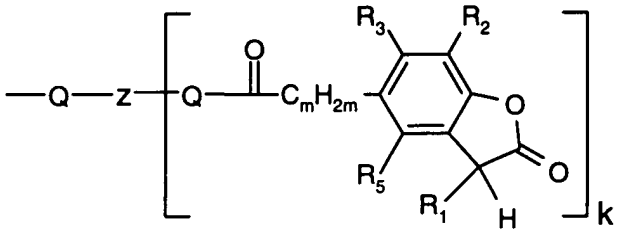
R'_7 is C_1-C_4alkyl and R'_8 is hydrogen or C_1-C_4alkyl;

R_{15} is hydroxy, $\left[-O^- \frac{1}{r} M^{r+}\right]$, C_1-C_{20}alkoxy; C_3-C_{20}alkoxy interrupted by O and/or

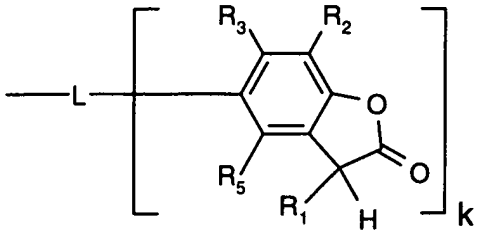
substituted by a radical selected from OH, phenoxy, C_7-C_{15}alkylphenoxy, C_7-C_{15}alkoxyphenoxy;

or R_{15} is C_5-C_{12}cycloalkoxy; C_7-C_{17}phenylalkoxy; phenoxy; $-N(R_{24})(R_{25})$; or a group of formula

IIIa or IIIb;



(IIIa);



(IIIb);

~~R'_{15} is C_3-C_{20}alkoxy interrupted by O and/or substituted by a radical selected from OH, phenoxy, C_7-C_{15}alkylphenoxy, C_7-C_{15}alkoxyphenoxy; or R'_{15} is C_5-C_{12}cycloalkoxy; C_7-C_{17}phenylalkoxy; phenoxy; or a group of formula IIIa or IIIb;~~

R_{32} is C_1-C_{18}alkanoyl; C_1-C_8alkanoyl substituted by phenyl or C_7-C_{15}alkylphenyl; C_3-C_{18}alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a linking group of valency (k+1) and is, as a divalent group,

-O-;

Q-C_2-C_{12}alkylene-Q;

-O-CH_2-CH(OH)-CH_2-O-;

-Q-C_2-C_{12}alkylene-Q-CO-C_vH_{2v}-O-;

-O-C_2-C_{12}alkylene-O-CH_2-CH(OH)-CH_2-O-;

~~Q-interrupted Q-C_4-C_{12}alkylene-Q;~~

Q-phenylene-Q or

Q-phenylene-D-phenylene-Q with D being C_1-C_4alkylene, O, S, SO or SO_2;

L, as a trivalent group, is Q-capped C_3-C_{12}alkanetriyl, a trivalent residue of a hexose or a hexitol, or a group $(-O-CH_2)_3C-CH_2OH$; -Q-C_aH_{2a}-N(C_bH_{2b}-Q-)-C_cH_{2c}-Q-;

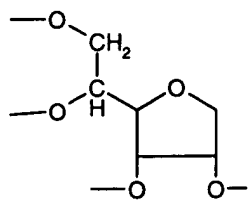
-Q-C_3-C_{12}alkanetriyl(-Q-CO-C_vH_{2v}-O-)$_2$;

-O-C_3-C_{12}alkanetriyl(-O-CH_2-CH(OH)-CH_2-O-)$_2$; and

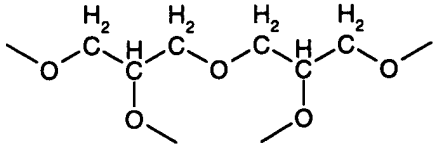
L, as a tetravalent group, is a tetravalent residue of a hexose or a hexitol;

-Q-C_4-C_{12}alkanetetryl(-Q-CO-C_vH_{2v}-O-)$_3$;

-O-C_4-C_{12}alkanetetryl(-O-CH_2-CH(OH)-CH_2-O-)$_3$; Q-capped C_4-C_{12}alkanetetryl; a group



or a group



;

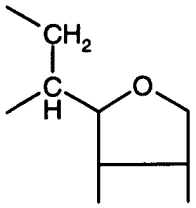
Q is oxygen or -NH-,

Z is a linking group of valency (k+1) and is as a divalent group C_2-C_{12}alkylene, Q-interrupted C_4-C_{12}alkylene, phenylene or phenylene-D-phenylene with D being C_1-C_4alkylene, O, S, SO or SO_2;

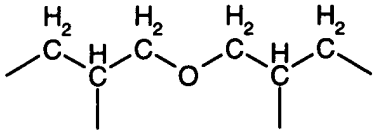
Z, as a trivalent group, is C_3-C_{12}alkanetriyl, a trivalent residue of a hexose or a hexitol, a group (-CH_2)$_3$C-CH_2OH, or a group -C_aH_{2a}-N(C_bH_{2b}-)-C_cH_{2c}-; and

Z, as a tetravalent group, is a tetravalent residue of a hexose or a hexitol, C_4-C_{12}alkanetetryl, a

group



or a group



;

a, b, c and k independently are 1, 2 or 3,

m is 0 or a number from the range 1-12,

s is 1 or 2,

~~and t is a number from the range 3-12,~~

v is 1, 2, 3, 4, 5, 6, 7 or 8;

and all other residues are as defined in claim 1 for formula I if n is 1.